

REMARKS

Claim 1 has been amended to include the D-E groups that were inadvertently omitted. Support for this amendment can be found in the specification and in the priority document. Also, claim 1 is amended to recite that if -D-E- is -CH₂-CH₂- or Y stands for an oxygen atom, than at least one of R^{2a} and R^{2b} is not hydrogen or methyl. Support for this amendment can be found throughout the specification. See, e.g., the original claims and the specific compounds disclosed. Claims 2-7 have been amended to include the naturally occurring epothilone A and B variables. Support for these amendments can be found for example at the first paragraph of applicants' specification. No new matter has been added. Claim 9 is amended to use language in accordance with conventional US practice. No new matter has been added.

The first Rejection Under 35 U.S.C. § 112, first paragraph

The Office Action recites the exact same rejection as the previous Office Action without any comment on applicants' prior remarks regarding this rejection. The rejection again states that the specification does not enable use of the invention commensurate in scope with the claims, that the claims are broader than the scope of enablement and generally refers to the *Wands* and *Foreman* case law. No reasoning is provided as to why this is so or why the PTO has reason to doubt the recitations in the specification that the compounds recited in the claims have the stated uses. The rejection fails to set forth any rationale or evidence for the conclusion of non-enablement.

In order to support a rejection under 35 U.S.C. §112, first paragraph, for lack of enablement, the burden lies first with the Patent and Trademark Office (PTO) to

provide evidence or objective reasoning substantiating the allegation that the enabling disclosure is not commensurate in scope with the claims. *In re Marzocchi et al.*, 169 USPQ 367 (CCPA 1971). As stated in *Marzocchi*:

".. a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of §112 *unless* there is reason to doubt the objective truth of the statements contained therein..",

and further,

"..it is incumbent upon the Patent Office, whenever a rejection on this basis is made, to explain *why* it doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions of its own with acceptable evidence or reasoning which is inconsistent with the contested statement." (emphasis original).

The instant specification clearly contains a teaching of the manner and process of using the invention in terms which correspond in scope to the claims.

The rejection, on the other hand, provides no explanation of *why* it doubts the truth or accuracy of these statements in the supporting disclosure nor does it back up the bare assertions of non-enablement with acceptable evidence or reasoning which establishes an inconsistency with the disclosure. It is, therefore, urged that the PTO has not met its initial burden in supporting a rejection for non-enablement under 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

The second Rejection Under 35 U.S.C. §112, Second Paragraph

The rejection of the claims under 35 U.S.C §112, second paragraph is respectfully traversed.

With regards to the phrase "D-E" at line 14 of claim1, the claim has been amended to include the groups which were inadvertently omitted.

With regards to the phrase "the molecule is identical to naturally occurring epothilone A or B", naturally occurring epothilones are well known to one skilled in the art. Additionally, the first paragraph of Applicants specification provides a structure and a reference to naturally occurring epothilone A or B. Thus, the meaning of the term is fully and clearly disclosed. The claims set forth clearly how the structure is modified from the known naturally occurring structure. The present claims are clearly supported by the disclosure. However, in the interest of furthering prosecution the claims have been amended to include the variables of naturally occurring epothilone A and B.

Thus the rejections under 35 U.S.C §112, second paragraph, should be withdrawn.

The Rejections Under 35 U.S.C. §103 over CA132:293587r and Nicolaou et al.

The rejections under 35 U.S.C. § 103, over CA132:293587r and Nicolaou et al. are respectfully traversed.

The data provided in the attached declaration by Dr. Ulrich Klar shows that it is advantageous to replace the 6(10)-methyl group present in naturally occurring epothilones with a higher alkyl. As stated in the Declaration, the data show that representative compounds of the instant claim scope have advantageous antiproliferative properties and improved sensitivity to MDR cell lines compared to naturally occurring epothilone B and epothilone D.

These distinct and advantageous properties of the claimed compounds over the reference compounds could not have been expected by one of ordinary skill in the art from the Nicolaou disclosure, or otherwise. The data refute the basis for the rejection stated in the Office Action, that there would have been an expectation in the art that structurally similar compounds would possess similar activity. Accordingly, it is urged

that the data provide clear and convincing evidence of the patentability of the instant claims and overcome any *prima facie* case of obviousness.

Furthermore, Nicolaou et al. provides no motivation to alter the structure to arrive at a genus wherein the R^{2a} or R^{2b} groups are ethyl or higher alkyl.

In view of the above remarks, it is respectfully submitted that CA132:293587r and Nicolaou fails to suggest Applicants' claimed invention. Withdrawal of the rejection under 35 U.S.C. §103 is respectfully requested.

In view of the above remarks, it is respectfully submitted that the claims of the application are fully supported by the specification and as such are in order for allowance.

Respectfully submitted,

Jennifer J. Branigan
Patent Agent (Reg. No. 40,921)



Brian Heaney (Reg. No. 32,542)
Attorney for Applicants

MILLEN, WHITE, ZELANO & BRANIGAN, P. C.
Arlington Courthouse Plaza I
2200 Clarendon Boulevard, Suite 1400
Arlington, Virginia 22201
Direct dial: (703) 812-5305
Internet address: jbranigan@mwzb.com

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